Water Quality NewsFlash

Published by California Department of Transportation, Division of Environmental Analysis, Office of Storm Water Policy

August 1, 2005 ***Number 05-31***

Storm Water Performance – *Blue Ribbon Panel to assess "quantifiable measures"* – The regulatory approach for managing storm water differs significantly from the regulatory methods used to control industrial wastewater, sewage treatment plant discharges and even air emissions and pesticide residues. In these non-storm water environmental protection efforts, the focus is on numeric standards. For example, a typical effluent limit in a sewage treatment plant permit would specify that total suspended solids (TSS) in the discharge could not exceed an average of 45 mg/l per day over a 7-day period. In this case, compliance is *performance-based*. Regulatory agencies are not generally concerned with what processes the sewage treatment plant uses as long as the effluent consistently complies with the numeric limits.

For stormwater, however, requirements are primarily process-based. The stormwater permittee is in compliance if it is implementing the control measures (called best management practices or BMPs) contained in a storm water management plan (for municipal-type runoff) or storm water pollution prevention plan (for construction site runoff). An evaluation of the compliance status requires a subjective judgement regarding whether the appropriate mix of BMPs has been selected and whether they are being correctly implemented. The *performance* of the BMPs, whether they produce stormwater with 20 mg/l TSS or 200 mg/l, is not necessarily relevant. Because of variability in runoff pollutants and lack of information on impacts, neither U.S. EPA nor the state has developed a set of technology-based effluent limits for stormwater. (Technology-based limits apply universally, regardless of location, and are based on an assessment of the performance capability of available technology.)

Storm water permits also typically require the runoff to comply with water quality standards, however, this mandate is uncertain since the permits do not translate the water quality standards into specific water quality-based effluent limits (WQBEL) applicable to the permittee. (For example, a sewage treatment plant will typically have a numeric limit for copper based on the local water quality standard for copper and a dilution factor.) Stormwater permittees can measure the concentration of pollutants in their discharges but have never been instructed on how to compare the results with standards in the receiving water. One of the possible reasons that WQBELs have not been used for stormwater is that the usual methods for translating receiving water standards into WQBELs would yield effluent limits with which many or perhaps most stormwater discharges could not comply.

This indeterminate compliance status for stormwater has caused frustration for permittees, regulatory staff, and interested 3rd parties such as environmental groups. To address this problem, the State Water Resources Control Board is planning to form a Blue Ribbon panel to assess the potential for making the stormwater program more performance-based. The panel will assess whether it is technically feasible to establish numeric effluent limitations, or some other objective criteria, for inclusion in storm water permits (industrial and construction general permits, and area-wide municipal-type permits including Caltrans). The eight members of the panel are scheduled to meet September 14th and 15th in Sacramento with some public testimony on the 14th.

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